REMARKS/ARGUMENTS

The Final Office Action mailed April 12, 2006 has been carefully considered. Reconsideration in view of the following remarks is respectfully requested.

Claim Status and Amendment to the Claims

Claims 1-71 are now pending.

Applicants gratefully acknowledge the indication of allowance of claim 52-71. Applicants are further grateful for the indication of allowability of claims 6-8, 12-13, 19-21, 25-26, 32-34, and 38-39, subject to their re-writing in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-2, 4, 6, 9, 12, 14-15, 17, 19, 22, 25, 27-28, 30, 32, 35, 38, 40, 46-47, 52, 57, 60, 62, 65, 67, and 70 have been amended to further particularly point out and distinctly claim subject matter regarded as the invention. The amendment also includes minor changes of a clerical nature.

No "new matter" has been added by the amendment.

The 35 U.S.C. §102 Rejection

Claims 1-2, 14-15, and 27-28 stand rejected under 35 U.S.C. §102(a) as being anticipated by Jacobson et al. (U.S. Pat. No. 6,044,402), among which claims 1, 14, and 27 are independent claims. This rejection is respectfully traversed.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 869 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). *See also*, M.P.E.P. §2131.

Claim 1, as amended, defines a method for controlling subscriber access in a network capable of establishing connections with a plurality of domain sites. The claimed method comprises (a) receiving, at an access server coupled to a first communication network and a second communication network, a communication from a subscriber on said first communication network, said communication optionally including a domain site identifier associated with a domain site on said second communication network, and (b) authorizing subscriber access to said domain site on said second communication network upon determining, in response to said receiving, that said domain site identifier is included in a list of authorized domain sites associated with a virtual circuit through which said communication is received, as recited in claim 1 as amended (emphasis added).

In the Office Action, the Examiner alleges that the elements of the presently claimed invention are disclosed in Jacobson. The Examiner specifically equates Jacobson's gateway **106**, first subnet **102-1**, second subnet **102-2**, destination address **146** (in a network header **142** of each communication packet **114**), and network address access list **212** with the claimed access

server, the claimed first communication network, the claimed second communication network, the claimed domain site identifier, and the claimed list of authorized domain sites, respectively. Furthermore, the Examiner alleges that "domain identifier" is given the broadest and reasonable interpretation in light of the specification, and that domains are defined by the IP address and all devices sharing a common part of the IP address are said to be in the same domain." In addition, in response to the Applicant's arguments, the Examiner alleges that the recitation of "a virtual circuit used to receive said communication" is an intended use and thus not patentably distinguishable. The Applicant respectfully disagrees for the reasons set forth below.

First, claim 1 does not recite an intended use of the virtual circuit because, in the authorizing process, the communication is received actually using the virtual circuit, as is well understood from the claim language. Also, claim 1 has been amended to recite "the list of authorized domain sites associated with a virtual circuit through which said communication is received" for further clarification.

With respect to the Examiner's allegation regarding "domain identifier," (the Final Office Action, page 7, section 20, point (A)), the claimed terms "domain" and "domain identifier" have been amended to "domain site" and "domain site identifier," respectively, based on the description on page 5, lines 16-23, page 6, lines 21-22, page 7, line 21 through page 8, line 6, page 17, lines 21-22, and page 18, lines 16-21. The claimed term "domain site" is, for example, a privately owned secure network or publicly owned network which may include a number of devices and terminals having corresponding individual IP addresses. The claimed "domain site identifier" identifies such a domain site (i.e., such a private/public network) as a whole, not

individual devices and terminals therein. Accordingly, although the claim language "domain site identifier" may be given a reasonably broadest interpretation in the light of the specification, such a reasonably broadest interpretation of "domain site identifier" does not encompass individual IP addresses. Therefore, contrary to the Examiner's allegation, Jacobson's alleged network access list of IP addresses does not teach or suggest the claimed list of domain site identifiers, as recited in claim 1.

Furthermore, in Jacobson, the blocking controller **170** initially determines a blocking mode for a protected host computer **104-1** using the blocking mode table **200** (column 16, lines 21-24 thereof). The connection from/to the protected host computer **104-1** is blocked if the source or destination network address is found in the network address block list **202** (column 17, lines 63-67 of Jacobson), allowed if the blocking mode for the host computer **104-1** is the open mode (column 18, lines 54-57 of Jacobson), and blocked if the blocking mode for the host computer **104-1** is the shutdown mode (column 18, lines 57-59 of Jacobson). Only when the blocking mode for the protected host computer **104-1** is the restricted mode (column 18, lines 42-47 of Jacobson), the network address access list **212** (the alleged list of authorized domain sites) is looked up in order to determine if another host computer's network address is in the network address access list **212** (column 18, lines 48-53 of Jacobson). Thus, the network address access list **212** may be associated with a restriction mode and/or the protected host computer for which the network address access list **212** used, there is no association between the network address access list **212** of Jacobson and a virtual circuit through which the communication (i.e., the communication packet **114**) is received.

It should be noted that Jacobson's connection blocking process which uses the network address access list **212** (and other tables and lists **200**, **202**, **204**, **206**, **208**, and **210**) is based on a connection information set obtained from each communication packet **114** (column 16, lines 21-24 thereof). Jacobson only teaches using the source and destination network addresses **144** and **146**, and the source and destination service access addresses **124** and **126** in the connection information set (column 16, line 18 through column 17, line 59 thereof). The packet **114** may also include the source and destination physical addresses **152** and **154** (column 19, lines 10-11 of Jacobson). However, as is well known to those of ordinary skill in the art, a virtual circuit is an end-to-end link or path over a packet switched network, and thus cannot be specified or identified by the source and destination addresses of a packet (in any layer) because there are many possible links or paths from the source to the destination.

Accordingly, Jacobson fails to teach or suggest associating the network address access list **212** (the alleged list of authorized domain sites) with a virtual circuit, or otherwise identifying a virtual circuit through which the communication (packet) is received, as recited in claim 1.

Claims 14 and 27 also include substantially the same distinctive features as claim 1. Accordingly, it is respectfully requested that the rejection of claims based on Jacobson be withdrawn.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

The 35 U.S.C. §103 Rejection

Claims 3-5, 9-11, 16-18, 22-24, 29-31, 35-37, and 40-51 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Jacobson, in view of Loehndorf, Jr. et al. (U.S. Pat. No. 6,094,437), among which claims 40 and 46 are independent claims. This rejection is respectfully traversed.

According to M.P.E.P. §2143,

> To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure.

Furthermore, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

In the Office Action, the Examiner specifically contends that the elements of the presently claimed invention are disclosed in Jacobson, except that Jacobson does not teach that the communication comprises a PPP session, which in turn comprises a tunneling session, and that the PPP session is forwarded onto a tunnel with assigned tunnel ID when the subscriber is authorized. The Examiner further contends that Loehndorf teaches the missing features and that it would be obvious to one having ordinary skill in the art at the time of the invention to incorporate Loehndorf into Jacobson in order to securely send data between networks and to

provide needed and improved functionality. The Applicants respectfully disagree for the reasons set forth below.

With respect to dependent claims of claim 1, 14, and 27, Jacobson, the primary reference, fails to teach the claimed "list of authorized domain sites associated with a virtual circuit through which the communication is received" (emphasis added) recited in the independent claims, as discussed above. Since Loehndorf only teaches the conventional layer two tunneling protocol, any combination of Jacobson and Loehndorf also fails to teach the claimed list of authorized domain sites associated with a virtual circuit. Accordingly, it is respectfully submitted that dependent claims 3-5, 9-11, 16-18, 22-24, 29-31, and 35-37 are patentable at least for the same reasons.

Claim 40 defines an access server capable of allowing subscribers of a communications system to gain exclusive access to a domain site associated with a virtual circuit. The claimed access server comprises (a) an authorized domain list request generator capable of generating an authorized domain list request including a virtual circuit identifier associated with a virtual circuit through which a PPP session authentication request is accepted, said PPP session authentication request including a domain site identifier, (b) an assessor capable of determining whether said domain site identifier is in an authorized domain list associated with said virtual circuit; a tunnel TD request generator capable of generating a tunnel ID request including said domain site identifier, and (c) an authorizer capable of granting users access to said domain site based upon said authorized domain list, as recited in claim 40, as amended (emphasis added).

As discussed above, Jacobson fails to teach or suggest the network address access list **212** (the alleged list of authorized domain sites) associated with a virtual circuit through which the communication (packet or request) is received or accepted, or identifying such a virtual circuit.

Thus, Jacobson, whether considered alone or combined with or modified by Loehndorf, does not teach or suggest the claimed invention as recited in claim 40. Claim 46 also include substantially the same distinctive feature as claim 40.

Accordingly, it is respectfully requested that the rejection of claims based on Jacobson and Loehndorf be withdrawn. In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

Other Dependent Claims

Claims 41-44 depend from claim 40, and claims 47-50 depend from claim 46, and thus include the limitations of claims 40 and 46, respectively. The argument set forth above is equally applicable here. The base claims being allowable, the dependent claims must also be allowable at least for the same reasons.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

Conclusion

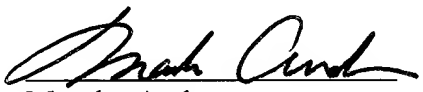
It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 50-1698.

Respectfully submitted,
THELEN REID & PRIEST, LLP

Dated: September 12, 2006



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